

**Knowledge, Attitudes, and Behavior
of Women Ages 65 and Older
On Mammography Screening and Medicare
Results of an Omnibus Survey**

Final Report

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TABLE OF CONTENTS

	<u>Page</u>
1. INTRODUCTION AND METHODOLOGY	1
2. SUMMARY OF KEY FINDINGS	2
3. DETAILED FINDINGS	3
3.1 Knowledge of Mammography Screening	3
3.1.1 Age for Beginning Regular Mammograms	3
3.1.2 Frequency of Mammograms	4
3.2 Breast Cancer Risk	5
3.2.1 Perceived Change in Risk with Age	5
3.2.2 Perceived Risk in the Absence of Risk Factors	6
3.3 Mammography Screening Behavior	6
3.3.1 Personal History of Mammography Screening	6
3.3.2 When Had Most Recent Mammogram	7
3.3.3 When Intend to Get Next Mammogram	7
3.3.4 Why Had Last Mammogram	8
3.3.5 Reasons for Not Getting a Mammogram	9
3.4 Knowledge and Use of Medicare's Mammography Benefit	9
3.4.1 Knowledge of Medicare	9
3.4.2 Sources of Information About Medicare	10
3.4.3 Method of Payment for Last Mammogram	11
4. COMPARISON OF CURRENT FINDINGS TO 1992 AARP SURVEY	11
4.1 Mammography Screening Behavior	12
4.2 Knowledge and Use of Medicare's Mammography Benefit	12
5. DISCUSSION	13
5.1 Perceived Importance of Mammograms	13
5.2 Mammography Knowledge	13
5.3 Mammography Behaviors	14
5.4 Medicare Coverage – Knowledge and Use	15
5.5 Survey Changes Since 1992	16
6. RECOMMENDATIONS	17
7. APPENDIX	20

**National Cancer Institute
Office of Cancer Communications**

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1. INTRODUCTION AND METHODOLOGY

Between March 10 and April 18, 1999, the Office of Cancer Communications (OCC) at the National Cancer Institute (NCI), in partnership with the Health Care Financing Administration (HCFA), conducted a national survey of U.S. women ages 65 or older. The overall purpose of the survey was to gather information on the knowledge, attitudes, and behaviors of older women concerning breast cancer, mammography screening, and Medicare coverage for mammography. More specifically, the survey objectives were:

- To assess older women's knowledge of the appropriate age and frequency for having screening mammograms;
- To gauge women's perceptions about their risk for getting breast cancer;
- To determine current mammography screening practices;
- To identify the reasons why older women seek (or do not seek) mammography screening; and
- To measure awareness and use of Medicare coverage for mammography screening.

To accomplish these objectives, a telephone omnibus survey was conducted with 814 women ages 65 or older by International Communications Research (ICR). (An omnibus survey is a shared-cost study in which different organizations add questions to a single questionnaire.) The survey consisted of eight closed-ended questions and three open-ended questions. Results were weighted to provide nationally representative and projectable estimates of the population of women 65 years of age and older. (See appendix for survey instrument.)

Section 2 below contains a summary of key findings from the survey.¹ Detailed findings are presented in Section 3. Section 4 compares the results of this survey to a study conducted by the American Association of Retired Persons (AARP) in 1992, a year after Medicare benefits for mammography were first introduced.² Section 5 contains a discussion of the 1999 survey findings, and Section 6 concludes with recommendations.

¹ Throughout this report, differences among subgroups are reported only when they are statistically significant at $p < .05$ using a standard 2-tailed t-test.

² OCC would like to express its appreciation to AARP for sharing their study and survey instrument, and for giving us permission to use or adapt some of their questions for comparison purposes.

2. SUMMARY OF KEY FINDINGS

- Almost 4 in 10 women ages 65 or older (38%) say that women should start having regular mammograms between the ages of 40 and 49. One-third (33%), however, think that women should start before age 40, and 16% believe the start time should be age 50 or older. More than 1 in 10 (12%) are unsure when regular mammograms should begin.
- While over half (57%) of women 65+ think a woman should have a mammogram every 1 to 2 years, 25% of those surveyed think a woman should have a mammogram less often, or when her doctor tells her to have one. A small subset (13%) think women should get mammograms more often than once a year.
- More than one-third of older women say they are not as concerned about getting breast cancer as they used to be when they were younger (36%) and that women who do not have any risk factors for breast cancer can be less concerned about getting a mammogram (34%).
- The vast majority (88%) of women ages 65 or older report having had at least one mammogram, representing an increase of 25% since AARP's survey in 1992. Of women who report having had a mammogram, the vast majority (80%) received their most recent screening two years ago or less – again, a substantial increase from 1992 (55%). Lower screening levels (relative to the most recent mammogram) are found among women of lower economic levels, women who are not aware of Medicare reimbursement for mammograms, and women who have never used Medicare to pay for a mammogram.
- Half (50%) of those women who have had mammograms received them as part of routine preventive care. One-third (34%) of women who have had a previous mammogram also indicated that a doctor or other health professional had recommended it to them. Among those who had never had a mammogram, one-third (33%) reported that they didn't feel they needed it, and 18% mentioned that a doctor had not recommended it.
- The majority (73%) of women say that they intend to get their next mammogram within the coming year. This intention is strongest among women ages 65-69, women with high household income, and women aware of Medicare coverage of mammograms.
- More than three-quarters of women (77%) are aware that Medicare will cover the cost of mammograms. However, minority women and women who have never had a mammogram tend to have the least amount of awareness concerning Medicare coverage of mammograms.

- The most common sources of information about Medicare payment for mammography are doctors (25%), followed by the government (i.e., Medicare, Social Security), brochures, and the media (17% each).
- Over half of those surveyed (58%) have had actual experience using Medicare to pay for their mammograms – approximately the same percentage who reported Medicare reimbursement for mammograms in 1992 (64%). Use of Medicare benefits is more prevalent among women 70+, women in the lowest income bracket, and women who are aware of Medicare’s mammography coverage.

3. DETAILED FINDINGS

3.1 Knowledge of Mammography Screening

3.1.1 Age for Beginning Regular Mammograms

Almost four in ten women (38%) correctly identified the age bracket 40-49 as the time during which women should start having regular mammograms. As Table 1 illustrates however, a sizeable percentage of women believe regular mammograms should occur before age 40 or after age 50. About one in 10 don’t know when regular mammograms should occur.

Table 1.

At what age do you think a woman should start having regular mammograms?	%
39 years old or younger	33
40 to 49 years	38
50 years or older	16
Don’t know	12

Race, history of mammography screening, and awareness of Medicare coverage were associated with beliefs about the age at which women should start having regular mammograms.

- White women are more likely than minority women to think that regular mammograms should start at age 50 or older (17% vs. 8%). However, minority women are more likely than white women to state that they “don’t know” at what age women should start having regular mammograms (20% vs. 11%).
- Women who have had a mammogram are more likely to say a woman should start having regular mammograms between 40 and 49 than women who have not had a mammogram (41% vs. 18%).

- Women who are unaware of Medicare coverage for mammograms are less likely than those who are aware to know that women should start having regular mammograms at age 40-49 (40% vs. 31%). Unaware women are also more likely to indicate that they don't know when regular mammography screening should start (24% vs. 8%).

3.1.2 Frequency of Mammograms

More than half (57%) of women correctly identified 1-2 years as the frequency with which women should have regular mammograms. However, a sizeable percentage (42%) of women seemed to have less accurate knowledge, or no knowledge, about the frequency with which women should have regular mammograms. Table 2 outlines these findings.

Table 2.

How often should a woman have a mammogram once she reaches that age? Would you say she should have a mammogram....	%³
More often than once a year	13
Once every 1-2 years	57
Once every 2 ½ years or longer	11
When doctor advises	14
Don't know	4

History of mammography screening, awareness of Medicare coverage, and concern about breast cancer risk as one ages were associated with how frequently a woman thinks a woman should have a mammogram.

- Women who have had a mammogram are more likely than women who have not had a mammogram to say a woman should have a mammogram once every 1-2 years (62% vs. 28%).
- Women who are aware of Medicare coverage for mammograms are more likely to believe a woman should receive a mammogram every 1-2 years than women who are not aware (62% vs. 44%).
- Women who have remained concerned about their breast cancer risk as they have gotten older are more likely to identify the correct interval for obtaining regular mammograms than women who have become less concerned over time (65% vs. 50%).⁴

³ Please note that table percents in this report do not always add to 100 due to rounding.

⁴ Survey participants were asked how much they agreed or disagreed with the following statement using a 5-point scale: "I am not as concerned about getting breast cancer as I used to be when I was younger." In the analysis, "strongly agree" and "somewhat agree" responses were collapsed, as were "strongly disagree"

3.2 Breast Cancer Risk

3.2.1 Perceived Change in Risk with Age

More than a third (36%) of women agree they are not as concerned about getting breast cancer as they used to be when they were younger. As can be seen in Table 3, however, almost half (48%) of women disagreed with this statement, indicating that their concern has not diminished.

Table 3.

How much do you agree or disagree with the following statement: I am not as concerned about getting breast cancer as I used to be when I was younger. Would you say you...?	%
Agree Strongly	20
Agree Somewhat	16
Neither Agree nor Disagree	10
Disagree Somewhat	16
Disagree Strongly	32
Don't Know	7

Concern about getting breast cancer as one ages varied with respondent age, income, and method of mammography payment.

- Older women (age 70 or older) are more likely than women ages 65-69 to agree they are not as concerned about getting breast cancer as they used to be when they are younger (39% vs. 28%).
- Women with household incomes under \$25,000 are more likely than those with higher incomes to believe they are less vulnerable to breast cancer as they get older (41% vs. 30%).⁵
- Women who use Medicare are less likely than women who use other forms of payment for mammography screenings to say they are not as concerned about getting breast cancer as they were when they were younger (31% vs. 41%).

and “somewhat disagree” responses. Concern about breast cancer as one gets older may be considered a proxy for self-perceived risk; that is, those agreeing with the statement may be viewed “at more risk,” while those disagreeing may be viewed “at less risk.”

⁵ Income data should be viewed with some caution since 11% of respondents refused to provide this information.

3.2.2 Perceived Risk in the Absence of Risk Factors

A third (34%) of women agree that women who do not have risk factors for breast cancer can be less concerned about getting a mammogram. As shown in Table 4, however, more than half of respondents (57%) disagree with this statement, indicating that they believe women should continue having mammograms, even when there are no risk factors.

Table 4.

How much do you agree or disagree with the following statement: Women who do not have any risk factors for breast cancer can be less concerned about getting a mammogram. Would you say you...?	%
Agree Strongly	17
Agree Somewhat	17
Neither Agree nor Disagree	4
Disagree Somewhat	16
Disagree Strongly	41
Don't Know	5

Perception about breast cancer risk in the absence of risk factors appears to vary with income and concern about getting breast cancer as one ages.

- Women in the lowest income bracket (under \$15,000) are more likely than women in the higher income brackets (\$25,000 and up) to agree that women who do not have risk factors can be less concerned about getting a mammogram (42% vs. 27%).
- Women who are not as concerned about getting breast cancer as they were when they were younger are also more likely to underestimate their need for a mammogram in the absence of risk factors (51% vs. 22%).

3.3 Mammography Screening Behavior

3.3.1 Personal History of Mammography Screening

The vast majority (88%) of women have had a mammogram at least once in their lives while a small number (12%) of women have never had a mammogram. Awareness of Medicare coverage for mammograms seems to be associated with whether women have ever received a mammogram.

- Women who are aware that Medicare covers mammograms are more likely to have had a mammogram than women who are not aware that Medicare covers a mammogram (92% vs. 77%).

3.3.2 When Had Most Recent Mammogram⁶

Among those who have ever had a mammogram, the majority of women (80%) are up to date in their mammography screenings. However, one in five women (19%) are either not current or are unaware of when they received their most recent mammogram. Table 5 illustrates these findings.

Table 5.

When did you have your most recent mammogram? Was it...	%
Within the last year	61
1-2 years ago	19
2 or more years ago	19
Don't know	1

Income, region of the country, and awareness/use of Medicare coverage are associated with the timing of mammography behavior. Timing also varies with views on whether one's risk increases or decreases with age.

- Women with household incomes of \$25,000 or more are more likely than women with household incomes under \$25,000 to have had a mammogram within the last year or two (70% vs. 55%).
- Women residing in the West are less likely than women living in the Northeast, South, or North Central regions of the country to have had a mammogram in the past two years (72% vs. 86%, 80%, and 84%, respectively).
- Women who are aware that Medicare covers mammograms are more likely than those unaware of Medicare coverage to have received a mammogram within the past year or two (83% vs. 70%). In addition, those who paid for their mammogram with Medicare are more likely than those using other forms of payment to have received a mammogram within the last two years (85% vs. 74%).
- Those who are less concerned about getting breast cancer now than when they were younger are less likely to have had a mammogram in the past year or two than those who are still concerned about getting breast cancer (73% vs. 86%).

3.3.3 When Intend to Get Next Mammogram

The majority of women (85%) indicated an intention to receive another mammogram within the next 1-2 years. The remaining 16% reported that they intend to either wait longer than 2 years, will never have another mammogram, or don't know when they intend to have another one. Table 6 presents these findings.

⁶ The base for calculations in sections 3.3.2 through 3.3.4, as well as section 3.4.3, is 719 women.

Table 6.

When do you intend to get your next mammogram? Do you think it will be....	%
Within the next year	73
1-2 years from now	12
2 or more years from now	3
Will never have another mammogram	8
Don't know	5

Differences concerning when to get the next mammogram varied by age, income, and awareness of Medicare coverage. Degree of concern about breast cancer with increasing age was also associated with future mammography intent.

- Women ages 65-69 are more likely than older women (age 70+) to indicate they will have another mammogram within the next year (80% vs. 70%).
- Women in the highest income bracket (\$40,000 and above) are more likely than women in the lowest income bracket (under \$15,000) to say they plan to have a mammogram within the next year (80% vs. 68%).
- Women who are aware of Medicare coverage for mammograms are more likely than women who are not aware to say they will get a mammogram within the next year (75% vs. 64%).
- Those who are still concerned about getting breast cancer in their later years are more likely to plan on having a mammogram in the next year than are those who are not as concerned as they used to be when they were younger (80% vs. 64%).

When timing of last mammogram and intention to get another mammogram were compared, a number of additional findings were revealed. Of the 80% of respondents who received their most recent mammogram in the past two years, the vast majority (81%) stated their intention to get another mammogram within the coming year. Looking at women who have received a mammogram in their lifetime (but not within the past two years), one-third (32%) reported that they will never have another mammogram, and another one-fifth are either unsure (13%) or are planning to wait three or more years (6%). The remainder plan to get their next mammogram within the next year (40%) or two (9%).

3.3.4 Why Had Last Mammogram

Among the women who had had a mammogram at least once in their lifetime, half (50%) got their last mammogram as part of routine preventive care. About a third (34%) said a doctor or health professional recommended a mammogram, and 8% had a lump, breast

problems, or symptoms of breast cancer.⁷ Age, income, and education were associated with a woman's decision about why she should get a mammogram.

- Women ages 65-69 are more likely than their older counterparts (age 70+) to have had their last mammogram as part of routine preventive care (56% vs. 47%).
- Women in the higher income groups (\$25,000 or more) are more likely than women in the lower income groups (under \$25,000) to get a mammogram as a part of a routine medical check up (58% vs. 45%). On the other hand, women in the lower income groups are more likely than those in the highest income groups to say their doctor or health professional recommended mammography (36% vs. 26%).
- Women with a high school degree (or less) are more likely than women with a college degree (or more) to say they had their last mammogram because their doctor or health professional recommended it (36% vs. 23%).

3.3.5 Reasons for Not Getting a Mammogram

Women who had not had a mammogram in their lifetime (n = 95) cited a variety of reasons. The most common response was that they did not think they needed it (33%) and that their doctor didn't recommend it (18%). Other reasons included lack of time (8%), fear (7%), not showing breast cancer symptoms (6%), cost of getting a mammogram (5%), and not feeling any control over getting breast cancer (5%).

Age appeared to be a factor in women's belief that they did not need a mammogram.

- Women ages 70 and older who never had a mammogram were considerably more likely to indicate that a mammogram was not necessary than were younger women ages 65-69 (44% vs. 10%).

3.4 Knowledge and Use of Medicare's Mammography Benefit

3.4.1 Knowledge of Medicare

Most women (77%) are aware that Medicare pays for mammograms. However, 19% did not know Medicare pays for mammograms, and 5% were uncertain whether Medicare covers this service. Race and mammography experience were associated with knowledge levels.

- Minority women are nearly twice as likely as white women to be unaware that Medicare covers mammograms (29% vs. 17%).

⁷ Findings reported in this section, as well as in sections 3.3.5, 3.4.2, and 3.4.3 are based on questions that allowed for multiple responses.

- Women who have had a mammogram are more likely than women who have not had a mammogram to know that Medicare covers mammograms (80% vs. 54%).

3.4.2 Sources of Information About Medicare

Of those who were aware of Medicare coverage for mammograms (n = 615), one-quarter (25%) learned about it through their doctor. Some (17%) learned about it through the government (Medicare/Social Security), while another 17% learned about it through the media. The most common media source was the newspaper (10%) followed by television (6%). Other information sources included brochures (17%) and insurance companies (12%). Information sources differed across a number of variables, including age, income, race, mammography and Medicare experience, and region of the country.

- Women ages 70+ are more likely than women under age 70 to learn about Medicare coverage through their doctors (29% vs. 14%) or the media (19% vs. 12%). Younger women, on the other hand, are more likely to become informed about Medicare coverage through a brochure (24% vs. 15%) or an insurance company (19% vs. 10%).
- Women in the highest income bracket (\$40,000 and above) are more likely than women in lowest income bracket (under \$15,000) to learn about Medicare coverage of mammograms through the media (29% vs. 11%). However, women in the lowest income bracket are more likely than women in the highest income bracket to learn about Medicare coverage of mammograms through their doctors (34% vs. 12%).
- White women are more likely than minority women to learn about Medicare coverage of mammograms through the media (19% vs. 5%). Minority women, however, are more likely than white women to learn about Medicare coverage of mammograms directly from a Medicare notice/statement (31% vs. 10%).
- Doctors are a more common Medicare information source for women with knowledge and experience of mammograms, as well as for women who have used Medicare benefits, as compared to women without this knowledge or experience. Specifically, doctors are the primary source of information for women who had had a previous mammogram (26% vs. 9%), who paid for their last mammogram with Medicare (31% vs. 16%), and who remain as concerned about breast cancer as when they were younger (29% vs. 19%).
- Women living in the West are less likely to have heard about Medicare from their doctors than women in the Northeast, North Central or South (10% vs. 28%, 30%, and 26%, respectively) and more likely to have heard about Medicare from a government source (24% vs. 15%, 14%, and 18%, respectively).

3.4.3 Method of Payment for Last Mammogram

The majority of women used either Medicare or private health insurance to pay for their last mammogram. Fifty-eight percent used Medicare to pay for their mammograms, while 46% used private or supplementary health insurance. Another 8% paid “out-of-pocket” and 3% received a low-cost or free exam. Differences among groups were most significant with age, income, and awareness of Medicare coverage.

- Women ages 70 or older women are more likely than women ages 65 to 69 to pay for mammograms through Medicare (65% vs. 41%). The younger women, on the other hand, are more likely to use private or supplementary health insurance (54% vs. 42%).⁸
- Women in the lowest income bracket (under \$15,000) are more likely than women in the highest income bracket (\$40,000 and above) to pay for mammograms through Medicare (65% vs. 48%). Conversely, women in the highest income bracket are significantly more likely than women in the lowest income group to pay for mammograms through private or supplementary health insurance (66% vs. 38%).
- Women who are aware that Medicare covers the cost of mammograms are significantly more likely than women who are unaware to have paid for their mammogram with Medicare (65% vs. 31%). Women who are not aware of Medicare coverage of mammograms are more likely than women who are aware to pay for mammograms using private or supplementary health insurance (60% vs. 42%) or out of pocket (14% vs. 7%).

4. COMPARISON OF CURRENT FINDINGS TO 1992 AARP SURVEY

In 1991, Medicare began providing women ages 65 and older with partial coverage for screening mammograms every two years. AARP, along with various Department of Health and Human Services agencies (including NCI), developed a campaign called “You Owe It to Yourself” in October 1991 to educate women ages 65 and older about the importance of having regular screening mammograms, and to raise awareness about partial reimbursement by Medicare for the cost these mammograms.

To establish a baseline measure of knowledge and experiences with mammography screening and the new Medicare benefit, AARP conducted a national omnibus telephone survey in 1991 before the public awareness campaign was launched. In 1992, approximately a year after the campaign began, a second survey was conducted to track changes in mammography screening knowledge and behavior as well as awareness of Medicare benefits for mammography. This survey, conducted by ICR (the same

⁸ This may be due to the fact that 21% of women in the younger age bracket are still employed, compared to 6% of women ages 70 and older.

company that conducted the current survey), included a nationally representative sample of 837 women ages 65 and older.

This section looks at findings from the 1992 survey that are comparable to the 1999 survey. Both surveys shared the common objectives of assessing older women's knowledge of screening mammograms, determining their mammography screening behavior, and measuring awareness and use of Medicare coverage benefits.

4.1 Mammography Screening Behavior (1999 vs. 1992)

In 1999 versus 1992, larger percentages of women ages 65 and older had had at least one mammogram and were having regular screening mammograms at the recommended frequency of every one to two years.

- In 1999, nearly nine in 10 women (88%) ages 65 and older reported having had at least one mammogram, compared to about six in 10 women (63%) in 1992.
- In terms of screening frequency, 1999 data showed that 80% of those older women who had ever had a mammogram had had one within the past two years; in 1992, that figure was 55%.
- In 1992, almost two-thirds of women (64%) reported having their last mammogram as part of routine preventive care, compared to 50% in 1999; 14% of women in 1992 had a mammogram because they found a lump in their breast or had symptoms of cancer, compared to 8% in 1999.⁹

4.2 Knowledge and Use of Medicare's Mammography Benefit (1999 vs. 1992)

In 1999, a greater percentage of women were aware of Medicare coverage for screening mammograms than in 1992, with physicians (rather than the media) being the most frequent source of this information. Although a similar number of women ages 65 and older were using Medicare's benefits to help pay for mammography screening, less women were paying for their mammogram out of pocket in 1999 than they were in 1992.

- Twenty-three percent of women ages 65 and older were aware of changes in Medicare mammography coverage in 1992, although more than half (54%) did not know what the changes were. In 1999, when asked if they knew about Medicare paying for mammograms, most women (77%) answered affirmatively.¹⁰

⁹ Percentages exceed 100 due to acceptance of multiple responses.

¹⁰ Although the 1992 and 1999 questions were worded somewhat differently and designed to obtain slightly different information about women's knowledge of Medicare's coverage, some general conclusions may be drawn. In 1992, the survey asked women whether they had seen or heard anything about changes in Medicare's mammography coverage since January 1991 (referring, at the time, to Medicare paying part of the cost of screening mammography every two years for women ages 65 and older). A follow-up to this

- In 1992, the most common sources of information about changes in Medicare coverage benefits were the media (49%) and government agencies (16%). In 1999, one-quarter (25%) of women learned about Medicare coverage from their doctor (compared to 6% in 1992), while only 17% learned about it through the media. Government agencies remained constant as a source of information at about 16%.
- In 1992, almost two-thirds (64%) used the Medicare benefit to help pay part of the cost of their mammogram, compared to 58% in 1999. Also in 1992, 20% of women reported paying out of pocket for their mammogram, compared to 8% in 1999. Use of private health insurance remained about the same (42% in 1992; 46% in 1999).

5. DISCUSSION

5.1 Perceived Importance of Mammograms

The area of greatest concern identified in the current (1999) survey relates to respondents' perceptions about their risk for breast cancer and their ongoing need for a mammogram. While almost half of those surveyed remain as concerned about breast cancer as they were when they were younger, more than one-third stated that they were *less* concerned now. Another 7% were unsure. This suggests that older women may be deriving a false sense of security from their advancing age. It should be mentioned, however, that due the wording of the question, it is not clear how concerned respondents actually were when they were younger. As such, respondents indicating that their concern is not lessened may never have been that concerned to begin with. Therefore, we should not infer that half of respondents are appropriately enough concerned that they will continue to pursue regular mammograms. We can more safely assume, however, that regardless of initial level of concern, the third of the sample feeling less concerned has adopted a more risky attitude that could undermine regular screening.

Another element of concern relates to respondents' beliefs that women without specific risk factors do not need regular mammograms. Although more than half of those surveyed disagreed with this belief, one-third agreed with it and another 5% were unsure. Though still a minority opinion, this belief could also undermine commitment to getting regular mammograms.

5.2 Mammography Knowledge

Overall knowledge among respondents was quite low on the issue of when women should begin having mammograms and how frequently. While perhaps less important for women already 65 or older to know, only about one-third of respondents could correctly

question measuring exposure to the message about Medicare change then asked what these changes were. In 1999, the survey asked if women knew about Medicare paying for mammograms, but did not try to determine their actual knowledge.

identify that women should begin regular mammography in their 40s. The remainder believed that women should start earlier than 40, at age 50 or later, or they didn't know.

Of more relevance and concern are responses to how frequently women should get mammograms. A slight majority (57%) correctly indicated every 1-2 years, but the remainder thought it should be *more* frequently, *less* frequently, or only when their doctor advised them to get one. While this finding indicates confusion in a significant portion of the older female population, suggesting a need for more targeted education, it appears that there is limited actual impact on whether or not women actually get mammograms (See section 5.3 below).

5.3 Mammography Behaviors

The vast majority (88%) of women 65 or older have received at least one mammogram. Moreover, the majority of these have done so within the past two years and intend to get another within the next two years.

When responses concerning when women received their last mammogram are compared to when they intend to get their next mammogram, some interesting findings emerge which echo the knowledge findings. In short, there is a subset of respondents who appear to be following an *annual* screening schedule and a subset who are following a *less* than 1-2 year schedule.

The first group consists of the four-fifths (80%) of respondents who have received their most recent mammogram in the past two years. Of these, 81% intend to get another mammogram within the coming year. While this fits within NCI's recommendations for regular mammography, it may suggest a possible *over-vigilance* in screening behavior by some older women.

Of greater concern is the 19% of respondents whose last mammogram was two years ago or more. Of these, one third (32%) reported that they will never have another mammogram, and another one-fifth are either unsure (13%) or are planning to wait two or more years (6%). The remaining half might be labeled the "tardy" group; while their last mammogram was two or more years ago, they plan to get their next one within the next year (40%) or two (9%).

It is somewhat unclear from this study how consistently women are being encouraged by their health care providers to remain vigilant about regular screenings. Only a third of respondents stated that their doctor's recommendation had led to their last mammogram. On the other hand, half indicated that they had been screened as part of routine preventive care, and it is likely that a physician or other healthcare provider played some role in that. Notwithstanding this finding, it appears useful to continue promoting the role of physicians in stressing the importance of regular mammograms to women 65 years of age and older. This is particularly so in light of the sizeable percentage of women in this age group who indicated reduced concern about breast cancer with increasing age or less need for mammography in the absence of specific risk factors.

Among the 12% of women who had never received a mammogram, the primary reasons were believing they didn't need one (33%) and never having a doctor recommend one (18%). The belief that they didn't need one was particularly pronounced among women 70 years of age or older, with nearly half (44%) reporting this position.

There is some indication that women living in the Western United States may require further study and outreach. While they are no less likely to have had a mammogram than women in other regions, they are less likely to have had one in the last two years (72% vs. 81%). The majority of these women do intend to get mammograms in the next year (68%) or within the next two years (13%). In sum, they appear to differ from women in other regions largely by how likely they are to comply with the NCI recommendation of receiving a mammogram every 1-2 years.

5.4 Medicare Coverage – Knowledge and Use

Knowledge

Over three-quarters (77%) of respondents were aware that Medicare covers the cost of routine mammograms. However, this is counterbalanced by the nearly one-quarter (24%) who are unaware of this information. (For the sake of clarity, findings related to this unaware group are discussed at the end of this section.)

Sources of Knowledge

Aware respondents reported that their information about Medicare's mammography benefit had come primarily from one of four sources: doctors, government sources (e.g., Medicare or Social Security), informational brochures, and the media. However, no single source was mentioned by more than 25% of respondents. It would thus appear that there is no clear, systematic source for this information, but rather that respondent knowledge is the product of diffuse, multi-source messages. There were some tendencies toward specific channels based on demographics and mammography experiences.

Doctors were mentioned more frequently by respondents who were older (70+), low income (<\$15,000), had already had a mammogram, paid for their last mammogram through Medicare, were as concerned about breast cancer now as when they were younger, and who lived in the Northeast, North Central and Southern regions of the country.

General media were more often identified as the information source by women who were older (70+), higher income (>\$40,000), and white.

Medicare/Social Security Notices were reported most often by minority respondents.

Brochures and Insurance Companies were mentioned most often by respondents between 65 and 69 years of age.

Payment for Last Mammogram

Despite relatively high knowledge of Medicare coverage for mammograms, less than two-thirds (58%) actually took advantage of it. Further data analysis showed that close to half (43%) used only Medicare to cover the costs, while another 15% used Medicare and supplemental insurance. Almost one-third (32%) of the sample relied completely on private insurance.

The “Medicare Unaware”

The one subset of respondents that is most noteworthy are those not aware that Medicare provides coverage for routine mammograms. The 24% of respondents who fell into this category exhibited a set of characteristics and behaviors likely to reduce their likelihood of receiving regular mammograms.

Compared with their aware counterparts, these respondents were significantly less likely to know when women should begin getting regular mammograms or how frequently they should be screened. Moreover, they were less likely to have ever received a mammogram in their lifetime; more than one-fifth (23%) of the Medicare unaware respondents reported having never had a mammogram compared with only 8% of their aware counterparts.

Medicare unaware respondents were also less likely to have received a mammogram in the past two years, or to intend to get one in the coming year. Finally, not surprisingly, they were more likely to have paid for their most recent mammogram through non-Medicare options (i.e., private insurance or out of pocket).

Though the Medicare unaware are a minority of the overall population, the relative ease with which the Medicare mammogram benefit can be promoted to new and current enrollees suggests the importance of assuring the *knowledge* and *use* of it by these women.

5.5 Survey Changes Since 1992

The percent change, since 1992, in both the number of women ages 65 and older who report ever having a mammogram and those having their most recent mammogram in the past two years is both substantial and gratifying. “Ever having a mammogram” for women in this age category increased from 63% to 88%, while having a mammogram in the past two years increased from 55% to 80%.

Despite the fact that questions on Medicare benefits for mammography were asked somewhat differently in 1992 and 1999¹¹, awareness of these benefits seems to have increased greatly (from 23% to 77%). It is also interesting to note that while women attributed their knowledge of Medicare coverage in 1992 mainly to the media, physicians are now their primary source of information. After physicians, respondents now learn

¹¹ See footnote 10.

about Medicare payment equally often through brochures, government notifications, and the media.

One finding that is somewhat difficult to interpret is the decline (where one might have expected an increase) in the number of women who report having their most recent mammogram as part of routine or preventive care (64% in 1992; 50% in 1999). The most likely explanation for this relates to the wording and sequence of questions in the two surveys. In 1992, women were first asked about what motivated their decision to have a mammogram (i.e., whether their doctor recommended it, they came to the decision on their own, or they asked their doctor about it); they then were asked an open-ended multiple-response question about why they went for their last mammogram. Responding to the latter question, almost two-thirds (64%) of women indicated that they went for a mammogram as part of regular preventive care. Recommendation by a doctor was not given as a response to this question, probably because women had described their doctors' involvement in the decision to have a mammogram in the preceding question.

In 1999, however, women were asked only one open-ended, multiple-response question related to why they had their last mammogram. Having not been previously asked anything about their doctors' involvement in this decision, 34% indicated that a doctor or other health professional had recommended it, and half responded that they had their last mammogram as part of their preventive care. Because a doctor's recommendation may be intrinsically regarded as part of a woman's routine medical care, it is likely that some percentage of those whose only response (in this multiple-response question) was "the recommendation of a doctor or other health professional" were in fact seeking a mammogram as part of their regular preventive care. Therefore, the percentage of women who received a mammogram as part of their regular medical care is probably higher than the 50% reported.

On the same subject, it is also interesting to note that there was a decline from 1992 to 1999 in the number of women who said they had a mammogram as a result of a breast problem or symptom (14% to 8%), indicating a possible movement toward preventive care.

Another finding open for interpretation is the number of women who have used Medicare to help pay part of the cost of their mammograms. In 1992 that number was 64%, but in 1999 it was 58%. This change was accompanied by a slight increase in the use of private or supplemental health insurance (42% to 46%) and a larger decrease in out-of-pocket payments (20% to 8%). These two trends, together with other societal changes affecting health care during this seven-year time period, could have contributed to the decreased use of Medicare.

6. RECOMMENDATIONS

While findings from this omnibus study indicate that the majority of women ages 65 and older are getting mammograms regularly and still see themselves at risk for breast cancer,

they also suggest areas for possible improvement. The following recommendations are presented for consideration.

- Education programs should highlight the fact that the risk of breast cancer increases with age and does not decline with the absence of risk factors. Approximately one-third of older women in this survey indicated said they are less concerned about breast cancer than they used to be when they were younger and that women who do not have any risk factors can be less concerned about getting a mammogram.
- More emphasis should be placed on communicating the correct frequency for older women to have mammograms. A total of 42% of women in this survey responded incorrectly to the question concerning how often a woman should have regular mammograms; one in four (25%) believe they should have mammograms less often than every 1-2 years or when their doctors tell them; another 13% think women should get mammograms more frequently than once a year; and 4 % don't know. Physicians should be reminded to recommend regular mammography every 1-2 years to their older female patients.
- Special efforts should be made to provide information about Medicare's mammography coverage to older women who have never had a mammogram and to women who have paid for their most recent mammogram out of pocket. Twelve percent of older women have never had a mammogram, and 8% of the women who have had a mammogram paid for their last mammogram out of pocket. Data from this survey also show that women who are unaware of Medicare's mammography benefit are significantly more likely to have never had a mammogram than women who are aware. Conversely, women who know that Medicare covers mammograms are more likely to have had a mammogram, and also to have had a mammogram in the last two years. Screening rates are thus likely to increase as a result of continued efforts to inform older women about Medicare coverage for mammograms.
- Greater effort should also be made to reach low income and minority women. Among respondents who have had at least one mammogram, women with lower household incomes are less likely to be up to date (i.e., compliant) with mammography screening recommendations than higher-income women. The findings also show that minority women are less aware of Medicare's mammography benefit than their white counterparts. Since minority and lower income women tend to learn about Medicare coverage mainly through the government and their doctors (respectively), it is important that the information coming from these sources be appropriately tailored to the needs of these groups.
- The role for physicians in promoting mammography screening, as well as raising awareness of Medicare benefits for mammography, should be expanded. When women with a history of mammography screening were asked why they had gone for their last mammogram, the second most frequent response (following "routine preventive care") was "recommendation by a doctor or health professional" (34%). For women who had never had a mammogram, the most cited reason for not having it

was because they didn't think they needed it and their doctor didn't recommend it. Across subgroups, physicians were the most common source of information to women about Medicare's mammography coverage.

- Further study of older women residing in the West should be considered. Findings from this study indicated that women in this part of the country are less likely to be following NCI's current recommendations for mammography and that they are also less likely to have learned about Medicare coverage for mammograms from their doctors. These somewhat unexpected findings may warrant further investigation.

##

APPENDIX

Questions Included on Omnibus Survey

EXCEL Job #O811-915 (10 Consecutive Waves)

March 10 - April 13, 1999

MammogQN.DOC

MAMMOGRAPHY OMNIBUS QUESTIONS

ASK ONLY OF WOMEN AGE 65 OR OLDER

- MA-1. Thinking about Medical issues, a mammogram is done to screen or check for breast cancer when there are no symptoms. It involves placing the breast between two plastic plates so that an x-ray of the breast can be taken. At what age do you think a woman should start having regular mammograms?
(IF RANGE GIVEN, SAY: "Please give me a single year")

___ RECORD EXACT AGE

DD Don't know

RR Refused

- MA-2. How often should a woman have a mammogram once she reaches that age? Would you say she should have a mammogram...
(READ LIST; ENTER ONE RESPONSE ONLY)

1 More often than once a year

2 Once every 1-2 years

3 Once every 2-3 years

4 Once every 3-4 years

5 Less often than every 4 years

6 When her doctor tells her to

D (DO NOT READ) Don't know

R (DO NOT READ) Refused

MA-3. How much do you agree or disagree with the following statements:

(INSERT STATEMENT)

Would you say you (READ CHOICES)

- 5 Agree Strongly
- 4 Agree Somewhat
- 3 Neither Agree nor Disagree
- 2 Disagree Somewhat
- 1 Disagree Strongly
- D (DO NOT READ) Don't know
- R (DO NOT READ) Refused

(ROTATE)

- a. Women who do not have any risk factors for breast cancer can be less concerned about getting a mammogram.
- b. I am not as concerned about getting breast cancer as I used to be when I was younger.

MA-4. Have you ever had a mammogram?

- 1 Yes CONTINUE
- 2 No SKIP TO Q.MA-9
- D Don't know SKIP TO NEXT INSERT
- R Refused SKIP TO NEXT INSERT

MA-5. When did you have your most recent mammogram? Was it...
(READ LIST; ENTER ONE RESPONSE ONLY)

- 1 Within the last year
- 2 1-2 years ago
- 3 2-3 years ago
- 4 3-4 years ago
- 5 5 or more years ago
- D (DO NOT READ) Don't know
- R (DO NOT READ) Refused

MA-6. For what reasons did you go for your last mammogram?
(DO NOT READ LIST; ALLOW MULTIPLE RESPONSES)

- 1 Doctor/other health professional recommended one
- 2 Follow-up to cancer
- 3 Had a lump/breast problem/symptoms of breast cancer
- 4 Haven't had one in a while and thought it was time
- 5 My age
- 6 Relation/friend had cancer
- 7 Relation/friend urged me to get one
- 8 Routine/Part of a regular medical checkup/preventive care (no symptoms or problems)
- 9 Saw/heard something in the news
- 0 Other (SPECIFY) _____
- D Don't know
- R Refused

MA-7. How did you pay for that mammogram? Tell me if you used any of the following:
(READ LIST; ENTER ALL THAT APPLY)

(ROTATE 1-4)

- 1 Medicare
- 2 Private or supplementary health insurance (e.g. Blue Cross, HMO, or Medigap insurance)
- 3 Paid out of my own pocket
- 4 Low cost or free screening (sponsored by hospitals, public health departments)
- 0 Other (SPECIFY) _____
- D (DO NOT READ) Don't know
- R (DO NOT READ) Refused

MA-8. When do you intend to get your next mammogram? Do you think it will be...
(READ LIST; ENTER ONE RESPONSE ONLY)

- 1 Within the next year
- 2 1-2 years from now
- 3 2-3 years from now
- 4 3-4 years from now
- 5 5 or more years from now
- N Never will have another mammogram
- D (DO NOT READ) Don't know
- R (DO NOT READ) Refused

ASK Q.MA-9 IF HAS NOT HAD A MAMMOGRAM IN Q.MA-4; OTHERS SKIP TO Q.MA-10

MA-9. For what reasons have you not had a mammogram?
(DO NOT READ; ENTER ALL THAT APPLY)

- 01 Cost
- 02 Didn't know where to go to get a mammogram
- 03 Doctor didn't recommend
- 04 Fear of results
- 05 I can't control whether or not I get breast cancer, so why bother getting a mammogram
- 06 I have other health concerns/problems that are more pressing/important
- 07 Lack of time
- 08 Mammograms are more important for younger women
- 09 Mammograms are only important for women who feel a lump or have other symptoms of breast cancer
- 10 Mammograms can be painful
- 11 Risk of radiation
- 00 Other (SPECIFY) _____
- DD Don't know
- RR Refused

MA-10. Do you know about Medicare paying for mammograms?
(IF NECESSARY, GIVE DEFINITION OF MEDICARE: Medicare is the government program that provides health insurance coverage to people age 65 or older.)

- | | | |
|---|------------|---------------------|
| 1 | Yes | CONTINUE |
| 2 | No | SKIP TO NEXT INSERT |
| D | Don't know | SKIP TO NEXT INSERT |
| R | Refused | SKIP TO NEXT INSERT |

MA-11. How did you learn about Medicare paying for mammograms?
(DO NOT READ; ENTER ALL THAT APPLY)

- 01 AARP publication or Modern Maturity
- 02 Brochure
- 03 Doctor
- 04 Friend or family member
- 05 Insurance company
- 06 Magazine
- 07 Newspaper
- 08 Poster
- 09 Radio
- 10 TV
- 00 Other (SPECIFY) _____
- DD Don't know
- RR Refused

